## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: August VERBRUGGEN et al. Confirmation No.: 7212 Serial No.: 10/595,821 Group Art Unit: 1651

371(c) Date: January 16, 2007 Examiner: Kade Ariani

Customer No.:

Title: USE OF POLYSULPHATED ALGINATE IN CELLULAR MATRICES

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria. VA 22313-1450

## REPLY TO ADVISORY ACTION ISSUED MAY 27, 2010

## The Advisory Action states:

21559

Verbruggen et al. teach polysulphated polysaccharides, xylosan polysulfate and chondroitin polysulfate, consistently improved aggrecan synthesis in the culture chondrocytes, and heparin was less active on these cells (page 1669 1st column 4th paragraph lines 1-4). Therefore, Verbruggen et al. neither teach away form [sic] using heparin (or heparin-like molecules) in chondrocyte cultivation nor concludes that heparin-like molecules have unpredictable effects on chondrocyte development.

## Applicant respectfully disagree.

The examiner refers to one passage in Verbruggen where it is mentioned that heparin was less active on these cells (in terms of aggrecan synthesis). This isolated passage leads the examiner to conclude that Verbruggen does not teach away from using heparin.

Verbruggen's teaching is clear (1) "... not heparin significantly increased total 35S incorporation in aggrecan", (2) "not heparin significantly increased aggrecan aggregate